Table 11

Effect of feeding oats on egg yolk fatty acid composition

Fatty acid	Control	Experimental [c]
C14:0	0.32 ± 0.05[a]	0.30 ± 0.03[a]
C16:0	29.16 ± 1.21[a]	28.38 ± 0.49[a]
C16:1	4.32 ± 0.44[a]	4.83 ± 0.42[b]
C18:0	7.14 ± 0.81[a]	6.15 ± 0.51[b]
C18:1	47.00 ± 2.00[a]	45.57 ± 1.47[b]
C18:2	1.96 ± 1.66[a]	14.56 ± 0.75[b]

[c]: Fatty acid composition of the yolk of eggs produced by laying hens fed an oat-containing diet
Averages having different superscripts are significantly different

2.5. Effect of feeding maize germ meal on egg yolk cholesterol concentration and fatty acid composition (Experiment 5)

The feeding of maize germ meal markedly lowered the cholesterol concentration of the egg yolk, which was 12.7±1.4 mg cholesterol per g of egg yolk in the control group and 9.7±0.7 mg g^{-1} in the experimental group. The difference was highly significant ($P<0.001$).

In this experiment, a significant difference ($P<0.05$) was observed in egg yolk fatty acid composition as regards the proportion of oleic acid (C18:1). The level of palmitic acid (C16:0) was also higher in the control group (Table 12). Linoleic acid could be detected in the egg yolk in only a few cases, and even in those cases only from the yolk of eggs produced by laying hens fed the diet containing maize germ meal.

Table 12

Effect of feeding maize germ meal on egg yolk fatty acid composition

Fatty acid	Control	Experimental [c]
C14:0	0.42 ± 0.10[a]	0.36 ± 0.07[a]
C16:0	30.13 ± 1.40[a]	27.40 ± 1.19[b]
C16:1	4.37 ± 0.76[a]	4.00 ± 0.49[a]
C18:0	9.01 ± 1.03[a]	9.05 ± 1.38[a]
C18:1	39.62 ± 2.03[a]	43.01 ± 1.80[b]
C18:2	16.28 ± 1.17[a]	15.62 ± 0.86[a]

[c]: Fatty acid composition of the yolk of eggs produced by laying hens fed a diet containing maize germ meal
Averages having different superscripts are significantly different